Patient Education | Imaging

Low-Dose CT During Pregnancy

Your physician believes that an X-ray of your abdomen (belly) and pelvis is the best way to find the cause of your abdominal pain. This imaging test is a computed tomography (CT) or "CAT" scan.

If you have any questions, talk with your physician or nurse.

Because you are pregnant, it is important to know that a CT scan of your abdomen will expose your unborn baby to radiation. To make sure the amount of exposure to your unborn baby is small, the care team will use lower amount of radiation for the CT scan.

This brochure will tell you about the benefits and risks of the low-dose CT scan and other options.

Benefits of the low-dose CT scan

When a pregnant woman has severe abdominal pain, it is very important to find out the cause of the pain fast. A CT scan can take an image of your internal organs in minutes. This lets your physician evaluate your condition. This will help them determine the next steps for treatment right away. Any delay in diagnosing or treating severe abdominal pain could result in harm to you and/or your unborn baby.

A CT scan is the preferred test to find problems in the abdomen and pelvis.

Risks linked to the low-dose CT scan

In general, side effects from radiation usually happen with high amounts of radiation exposure. For example, a high dose of radiation can slightly increase the chance of damage to an unborn baby's cells. With a low-dose CT, the care team will use the lowest amount of radiation to do the test. This lower dose reduces the chance of damage to an unborn baby's cells to nearly zero.

The risks from a low-dose CT scan are very small. They are like radiation-related risks that can happen with about 3 years of natural background radiation in daily living.

You need to use contrast for this CT scan. This is a liquid that highlights parts of the body in the scan. Contrast improves the quality of the image so that your physician can find problems. Studies show that contrast does not cause harm to unborn babies.

Other imaging options

In some cases, the care team may use different imaging tests to find the source of your abdominal pain. These tests do not expose you and your unborn baby to radiation, but they are not as fast or as accurate as a CT scan. This can cause delays in diagnosing your problem. Any delay in diagnosing your abdominal pain could result in serious harm to you and your unborn baby.

Magnetic resonance imaging

A magnetic resonance imaging (MRI) scan takes longer to do than a CT scan. It can take up to 1 hour to finish. The results may still leave questions. For example, if your physician suspects you have appendicitis and a normal appendix is not visible on your MRI, your physician will not have enough information to rule out appendicitis.

Ultrasound

An ultrasound is only useful when the test shows your internal organ(s). The unborn baby may be in the way. But, if the care team can see your internal organ and it is not normal, an ultrasound is very accurate. If your physician suspects you have appendicitis, an ultrasound may not be able to show an image of your appendix. Again, your physician will not have enough information to rule out appendicitis.

If the care team does an ultrasound and/or MRI, but the tests do not show clear results, you may still need a low-dose CT scan to give your physician the information they need.

Your physician knows the risks of this test. They believe it is in the best interests of you and your unborn baby to go ahead with a low-dose CT scan.

If you have any questions, please talk with your physician.

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